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**GREAT LAKES FOREST RESEARCH CENTRE
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Effect of tariff reductions on the Canadian fine paper industry

J. D. Johnson

Miscellaneous Report No. 15



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EFFECT OF TARIFF REDUCTIONS
ON THE CANADIAN
FINE PAPER INDUSTRY

J.D. JOHNSON

GREAT LAKES FOREST RESEARCH CENTRE

CANADIAN FORESTRY SERVICE

DEPARTMENT OF THE ENVIRONMENT

1984

MISCELLANEOUS REPORT NO. 15

©Minister of Supply and Services Canada 1984
Catalogue No. Fo29-8/15E
ISBN 0-662-13361-7
ISSN 0826-0222

Copies of this report may be obtained from:

Great Lakes Forest Research Centre
Canadian Forestry Service
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P.O. Box 490
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ABSTRACT

According to the most recent (1979) General Agreement on Tariffs and Trade (GATT), tariffs on fine paper entering Canada are to be reduced from 15% to 6.5% between 1980 and 1987. So far, a weakening Canadian dollar (vis-à-vis the American dollar) has discouraged any large influx of imports from the United States, yet Canadian producers are finding it increasingly difficult to compete with American production in many of the more common, finer paper grades. Moreover, with the reduction of tariffs, Canadian producers, at least in the short term, have become exposed to fluctuations in the Canada-United States exchange rate. Domestic producers must modify production facilities and marketing strategies in order to compete in an international environment. For many producers, this will mean rationalization of product lines, market development and sizeable financial commitment.

RÉSUMÉ

En vertu du plus récent (1979) accord général sur les tarifs douaniers et le commerce (accords du GATT), les tarifs douaniers sur les importations canadiennes de papier fin doivent être réduits progressivement et passer de 15 à 6.5% entre 1980 et 1987. Jusqu'à maintenant, la baisse du dollar canadien (par rapport à la devise américaine) a contribué à prévenir toute importation massive en provenance des États-Unis. Les fabricants canadiens trouvent malgré tout de plus en plus difficile de soutenir la concurrence avec les producteurs américains pour ce qui est d'un grand nombre de classes de papier fin parmi les plus en demande. De plus, la baisse des tarifs douaniers a rendu les fabricants canadiens plus vulnérables, du moins à court terme, aux fluctuations du taux de change canado-américain; ces derniers se voient contraints de modifier leurs installations, de même que leurs stratégies de mise en marché, pour demeurer compétitifs dans le contexte international. Bon nombre d'entre eux devront en conséquence rationaliser leur gamme de produits, développer leur marché et procéder à des engagements financiers considérables.



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OBJECTIVE OF THE REPORT

The reduction of tariffs on printing and writing papers entering Canada from the United States is encouraging significant changes in the marketing environment of the domestic fine paper industry. This report will highlight these changes and examine the effects they are having on the industry.

THE FINE PAPER INDUSTRY IN CANADA

Table 1 illustrates the distribution of fine paper production capacity in Canada. The majority of mills were established late in the nineteenth century next to major markets in southern Ontario and Quebec. Before 1982 there was very little modernization in this industry. Since then, however, a number of sizeable capital projects have been implemented, such that by mid-1984, approximately one-fifth of all Canadian production capacity will have been modernized.

Table 1. Distribution of Canadian fine paper production capacity, 1984^a, b.

<u>By Province</u>	<u>Location</u>	<u>Tonnes per year</u>	<u>Percent of total Canadian capacity</u>
Ontario			
Abitibi Price Inc.	Thunder Bay	108,000	10.1
Domtar Inc.	Cornwall	186,000	17.3
	Toronto	11,700	1.1
	St. Catharines	62,400	5.8
Eddy Forest Products Ltd.	Espanola	34,500	3.2
	Ottawa	50,700	4.7
Fraser Inc.	Thorold	85,700	8.0
Great Lakes Forest Products Ltd.	Dryden	123,000	11.5
	ONTARIO TOTAL	662,000	61.7
Quebec			
Domtar Inc.	Beauharnois	18,600	1.7
	Windsor	86,100	8.0
Eddy Forest Products Ltd.	Hull	80,700	7.5
Kruger Inc.	Trois Rivières	36,600	3.4
Rolland Inc.	Montreal	115,200	10.7
	QUEBEC TOTAL	337,200	31.3
British Columbia			
Island Paper Mills Ltd.	New Westminster	75,000	7.0
	BRITISH COLUMBIA TOTAL	75,000	7.0
	TOTAL CANADA	1,074,200	100.0
By Company			
Domtar Inc.		364,800	34.0
Eddy Forest Products Ltd.		165,900	15.4
Great Lakes Forest Products Ltd.		123,000	11.4
Rolland Inc.		115,200	10.7
Abitibi-Price Inc.		108,000	10.1
Fraser Inc.		85,700	8.0
Island Paper Mills Ltd. (50% owned by MacMillan Bloedel Ltd., 50% owned by Fraser Inc.)		75,000	7.0
Kruger Inc.		36,600	3.4
		1,074,200	100.0

^a Based on 342-day operating year

^b Does not include finishing and converting plants

Sources: Anon. 1983c, Coats 1983

The fine paper industry contributes much to the economy of Canada and specifically Ontario. This province alone accounts for 60% of all fine paper production capacity in Canada. The industry manufactures only 7.5% of all pulp and paper products by volume in Ontario, yet it employs over 20% of the entire pulp, paper and allied industry work force and accounts for 21% of the value of shipments of these industries. It is estimated that, in 1983, fine paper mills in Ontario employed over 4,700 people and paid out over \$100 million in wages. In all of Canada, it is estimated that the industry employed 7,200 people directly, generated wages of \$150 million and shipped products worth over \$750 million in 1983.

DEFINITION

For purposes of this report, it is necessary to aggregate the over 300 fine paper grades produced in Canada into broad classes. Fine paper will be defined as all paper with less than 50% groundwood content. This fine paper group has been divided into two classes:

- 1) book and printing papers (1-50% groundwood content);
- 2) business and writing papers (0% groundwood).

The common grades found in each of these classes are listed below.

Book and Printing Papers (1-50% groundwood content)

- book printing
- lithograph and offset printing papers
- rotogravure printing papers
- bulking book printing papers
- poster, label, billboard papers
- bible paper
- base stock for coated book printing papers

Business and Writing Papers (0% groundwood content)

- bonds, ledgers, copy and writing papers
- reproduction, duplicating, tracing papers
- manifold, onion skin, tablet papers
- photography papers
- manuscript, art papers, cover papers, parchments
- business machine and computer paper
- sensitizing base stock
- blueprint, plackline, bristols, cheque papers
- other fine papers

Source: Brunette 1983

INDUSTRY PERFORMANCE

Canadian fine paper production grew from 370,000 tonnes in 1965 to an estimated 940,000 tonnes in 1983 - an increase of 5% a year. Business and writing papers account for much of this increase, with production in this class of papers growing at 6% per year. Production levels of book and printing papers, on the other hand, have not changed significantly since 1970. Business and writing papers currently represent 75% of fine paper production, up considerably from 60% in the late 1960s. An industry-wide strike in 1975-1976 which lasted nine months and local strikes at Domtar Inc.'s Ontario fine paper mills in 1980-1981 which lasted seven months are clearly evident on the production curve. Figure 1 illustrates fine paper production from 1965 to 1983.

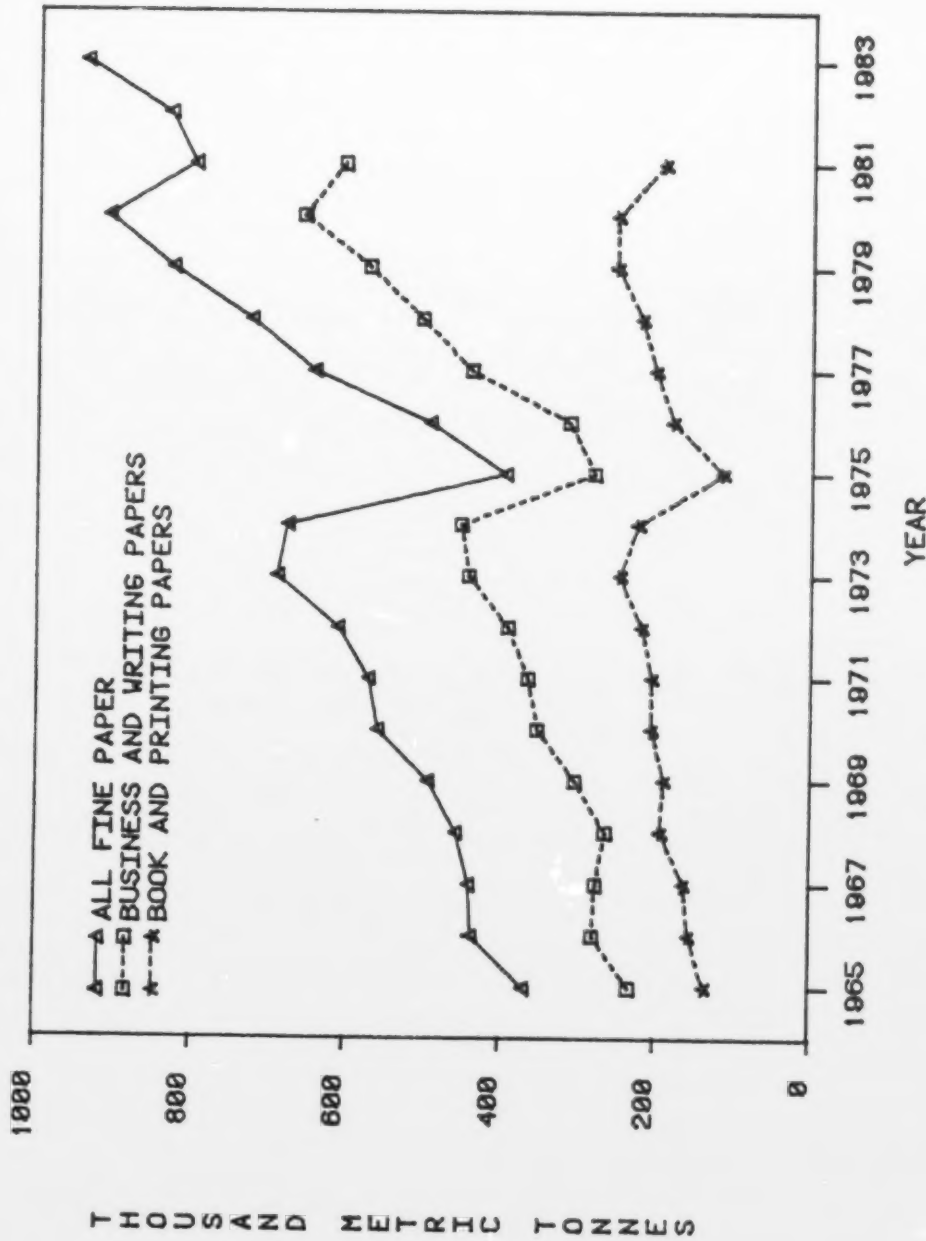
Unlike other pulp and paper products, fine paper fared relatively well during the 1982 recession. Strong demand and limited capacity supported prices throughout 1982 in both Canada and the United States. Operating rates fell only to 86% in 1982 and in 1983 averaged 93% across the industry. Increases in consumption can be attributed at least in part to the larger volumes of paper used with data processing equipment (Winens 1983). Ironically, the introduction of this equipment was predicted to reduce the demand for fine paper (*ibid.*). The 1975-1976 strike reduced domestic consumption by 25% over this period but, on average, consumption increased by 5.4% each year between 1965 and 1983. Table 2 illustrates shipments, exports, imports and consumption of fine paper in Canada between 1965 and 1983.

IMPORTS

American producers have clearly demonstrated an ability to compete in Canadian markets. Before 1970, imports accounted for no more than 10% of domestic consumption and most of these were of product lines not manufactured in Canada. This share gradually increased in the early 1970s.

Then, spurred on by favorable exchange rates, American producers picked up slack production generated by strikes in Canada in 1975 and 1976 to claim 45% of consumption during this period. What was more important, they continued to hold onto roughly 25% of the market after the strike until 1982. Imports fell to 20% of consumption in 1983 as American producers became discouraged by the still weakening Canadian dollar and were attracted by the increasing demand in their own country. American paper has in the past accounted for virtually all of Canadian imports.

It would appear that American producers are not actively trying to break into Canadian markets. Fine paper exports from the United States to Canada represent just over 1% of total American production. Moreover, with the present exchange rate and tariffs, it is likely that American margins on Canadian sales are just enough to cover fixed costs with very little contribution to profit. The following calculation illustrates that, if the preceding assumption is true, and if Canadian producers enjoyed 15% margin (before tax), then the production of paper imported in 1983 must have been 14% more cost efficient (U.S.\$) to have overcome both the exchange rate and tariff barriers.



Notes: 1) Production data are not available by class for 1982-1983.
2) Total production for 1983 is estimated.

Sources: 1) Statistics Canada. Pulp and paper mills. Cat. No. 36-204. Annual. Various issues.
2) Canadian Pulp and Paper Association. Statistical Bulletin. Monthly. Various issues.

Figure 1. Canadian fine paper production, 1965-1983

Table 2. Shipments, exports, imports and apparent consumption of fine papers in Canada.

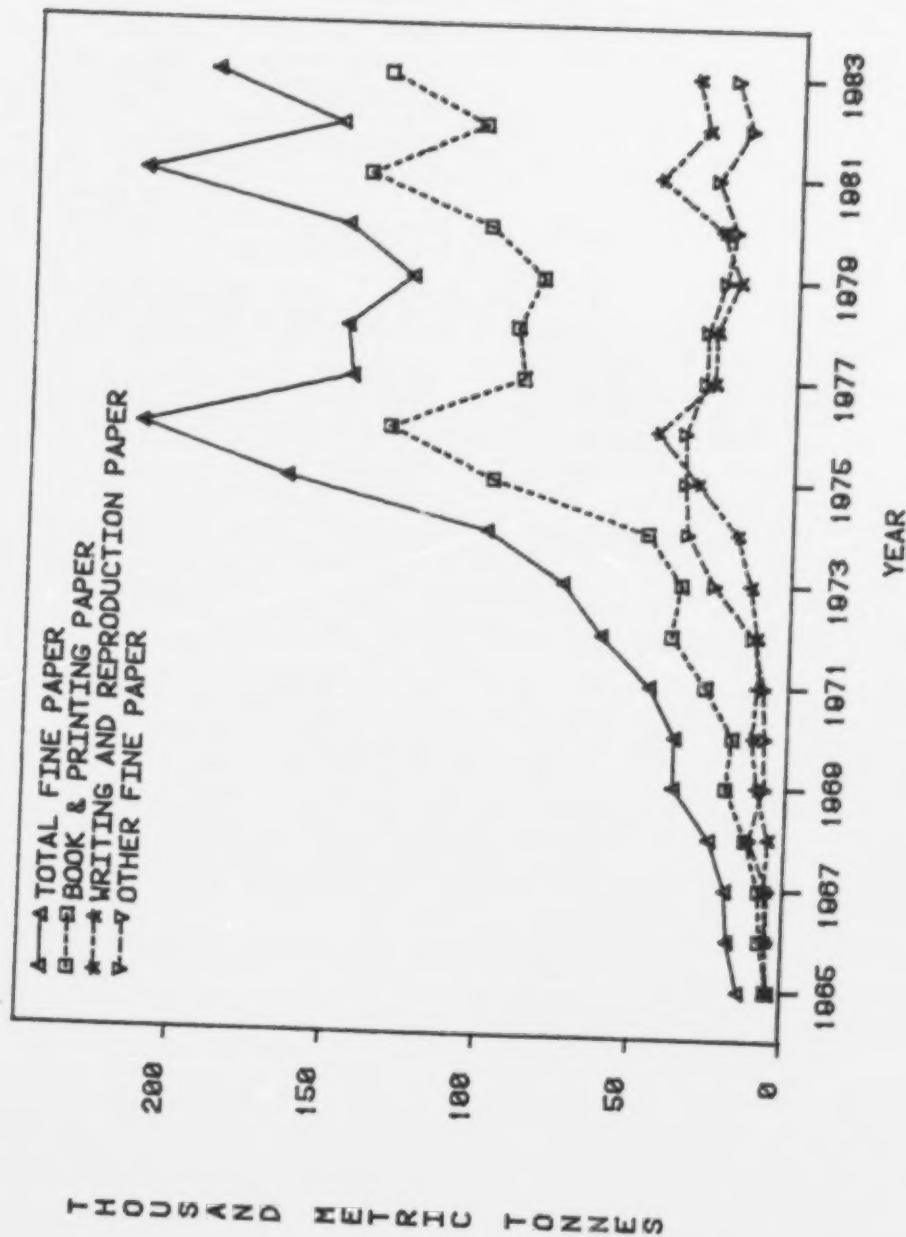
('000 tonnes)

Year	Shipments	Exports	Imports	Apparent domestic consumption
1983	950	211	191	930
1982	824	254	198	768
1981	780	284	214	710
1980	895	388	148	655
1979	791	367	126	550
1978	702	308	147	541
1977	620	265	145	500
1976	472	216	213	469
1975	393	152	166	407
1974	658	223	100	535
1973	685	162	75	598
1972	591	141	62	512
1971	555	160	46	441
1970	535	183	37	389
1969	468	224	37	389
1968	439	101	25	363
1967	426	60	19	385
1966	411	38	18	391
1965	370	40	14	344

Sources: 1) Statistics Canada. Pulp and paper mills. Cat. No. 36-204. Annual. Various issues.
 2) Statistics Canada. Imports by commodities. Cat. No. 65-007. Monthly. Various issues.
 3) Statistics Canada. Exports by commodities. Cat. No. 65-004. Monthly. Various issues.
 4) Canadian Pulp and Paper Association. Statistical bulletin. Monthly. Various issues.

Book and printing papers accounted for the largest growth in imports, increasing from 4,400 tonnes in 1965 to 135,000 tonnes in 1983. This dramatic growth in imports of book and printing papers is not as threatening to Canadian producers as it first might seem since exports of these grades increased even faster over this period. In fact, Canada is a net exporter of book and printing papers.

Imports of business and writing papers increased from 9,600 tonnes in 1965 to 56,000 tonnes in 1983. Most of this growth can be attributed to large increases in the importation of writing and reproduction papers -- from 5,000 tonnes to 35,000 tonnes over this period. These imports compete directly with Canadian production. Figure 2 shows fine paper imports by product group. This suggests that American producers are quite able to compete with Canadian producers in the more common writing, reproduction and printing paper groups.



Source: Statistics Canada, Imports by commodities. Cat. No. 65-007. Monthly. Various issues.

Figure 2. Fine paper imports by product grouping, 1965-1983

Estimate of cost efficiency in the United States

- Assumptions:
- 1) American producers are just breaking even in the Canadian market.
 - 2) Canadian producers are realizing a 15% profit margin before tax.
 - 3) The Canadian fine paper tariff is 10.8%.
 - 4) For the same product, American and Canadian selling prices are virtually the same.
 - 5) The Canadian dollar is valued at 81 cents U.S.

At a 15% profit margin, Canadian cost (C\$) = .85 SP where SP = selling price in Canadian market.

At a break-even selling price, American producer cost (U.S.\$) = $\frac{SP}{1.108} \times .81 = .73 SP$

Therefore, American producer cost (U.S.\$) must be $1 - \frac{73}{85}$ (14.1%) lower than Canadian producer cost (C\$).

EXPORTS

Canadian fine paper producers have not been export-oriented for several reasons. Until recently, most of Canada's fine paper machines were older and much smaller than machines in the United States, so that it was difficult for Canadian producers to compete internationally in the more common grades. At present, Domtar's Cornwall mill is the only Canadian mill capable of competing with American producers internationally in the common fine paper grades (Topp 1983).

In addition, other major world markets have in the past been protected by tariffs. Much the same as in Canada, however, there is a trend toward the reduction of tariffs in these markets. It was resolved under the Multilateral Trade Negotiations in 1977 that United States tariffs on fine papers would be reduced from 3.8% to 0.8% in 1987. (There is no duty on newsprint exports to the United States.)

The European Economic Community (EEC) is reducing its tariffs as well, but its rates will remain well above those of the United States and, to a lesser degree, those of Canada. Between 1980 and 1987, the EEC is scheduled to reduce its tariff on writing papers and 'other' papers from 12 to 9% (Anon. 1979).

Before 1968, exports from Canada rarely exceeded 15% of total shipments. As a result of large increases in the export of book and printing papers in the late 1960s and again after the 1975-1976 strike, this rate increased to 45%. Figure 3 illustrates that since 1981 the export of printing papers dropped sharply. In 1983 total fine paper exports accounted for 22% of total shipments.

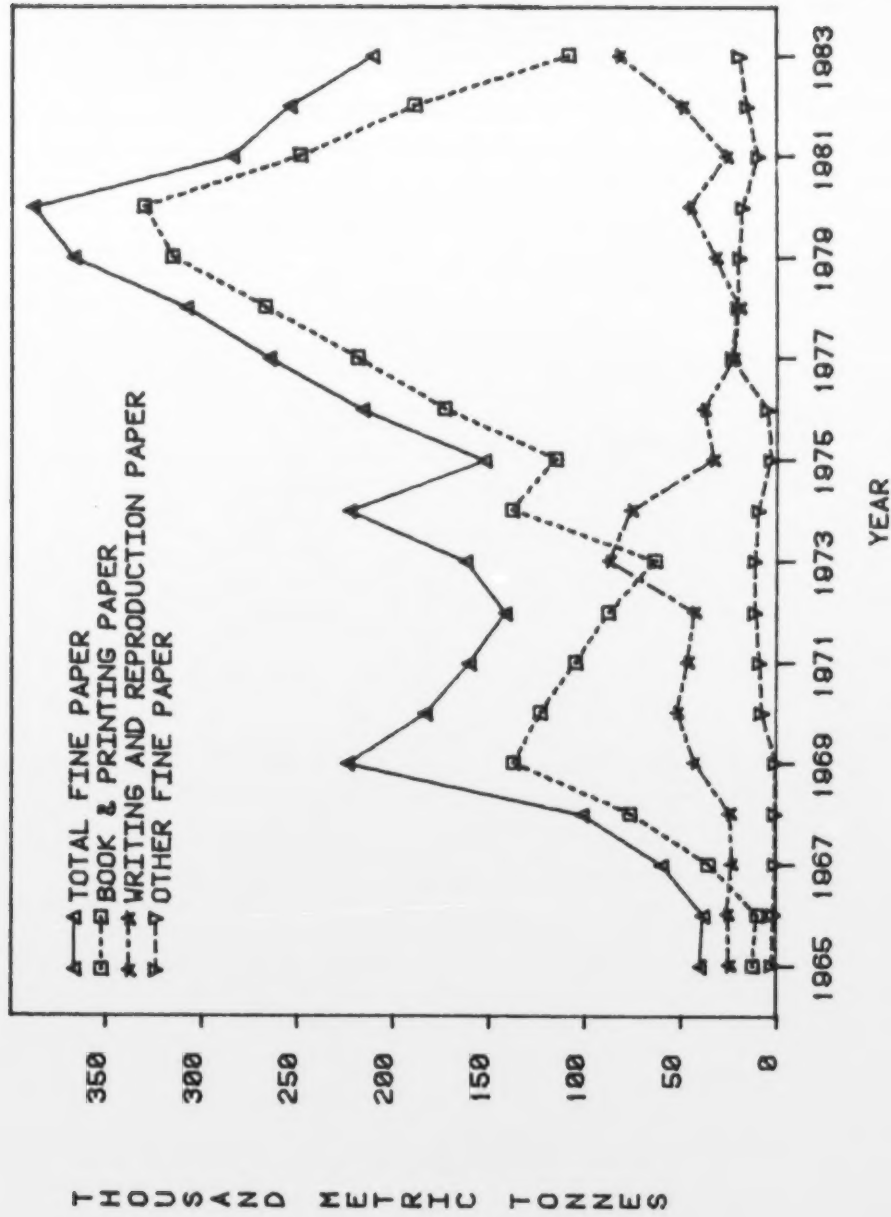
The export of book and printing papers has been extremely volatile. Exports peaked in 1969 at 137,000 tonnes and again in 1980 at 330,000 tonnes. In spite of a devalued Canadian dollar, exports of book and printing papers dropped sharply to only 108,000 tonnes in 1983. This can be explained, at least in part, by increased capacity and competition from American producers in their own market. In the past, printing papers accounted for the majority of book and printing paper exports. However, a large increase in the export of base stock for coated printing papers in the mid-1970s reduced the share of printing papers to approximately 50% of all exports of these papers over this period.

Virtually all book and printing papers that are exported go to the United States, but before 1967 only 55% went to the American market. Canadian producers have been squeezed out of offshore markets and forced to compete in the United States as a result of the establishment of fine paper facilities in these regions and strong competition from American and Brazilian book and printing manufacturers.

Business and writing paper exports increased from 28,000 tonnes in 1965 to 98,000 tonnes by 1973, but strong domestic demand reduced the exportation of these papers throughout the rest of the 1970s. Between 1981 and 1983, a declining Canadian dollar (vis-à-vis the American dollar) and strengthening American demand bolstered exports of these papers significantly from 35,000 tonnes to 102,000 tonnes.

Before 1969, fewer than 10% of business and writing paper exports were destined for the United States; however, by 1983 this figure had increased to 86%. Canadian producers moved gradually out of offshore markets into the United States where a favorable exchange rate and strong demand increased their ability to compete.

In summary, Canadian producers have come to rely heavily on the United States as an export market, particularly for writing and reproduction paper. To put the situation in its proper perspective, however, Canadian production accounts for just over 1% of the American fine paper market. It is unlikely that American producers feel threatened by Canadian production. Canadian fine papers are exported primarily to support the operating levels of Canadian producers. This practice is, of course, facilitated when the Canadian dollar is devalued and when American demand exceeds supply.



Source: Statistics Canada. Exports by commodities. Cat. No. 65-004. Monthly. Various issues.

Figure 3. Fine paper exports by product group, 1965-1983

EFFECTS OF TARIFF REDUCTIONS

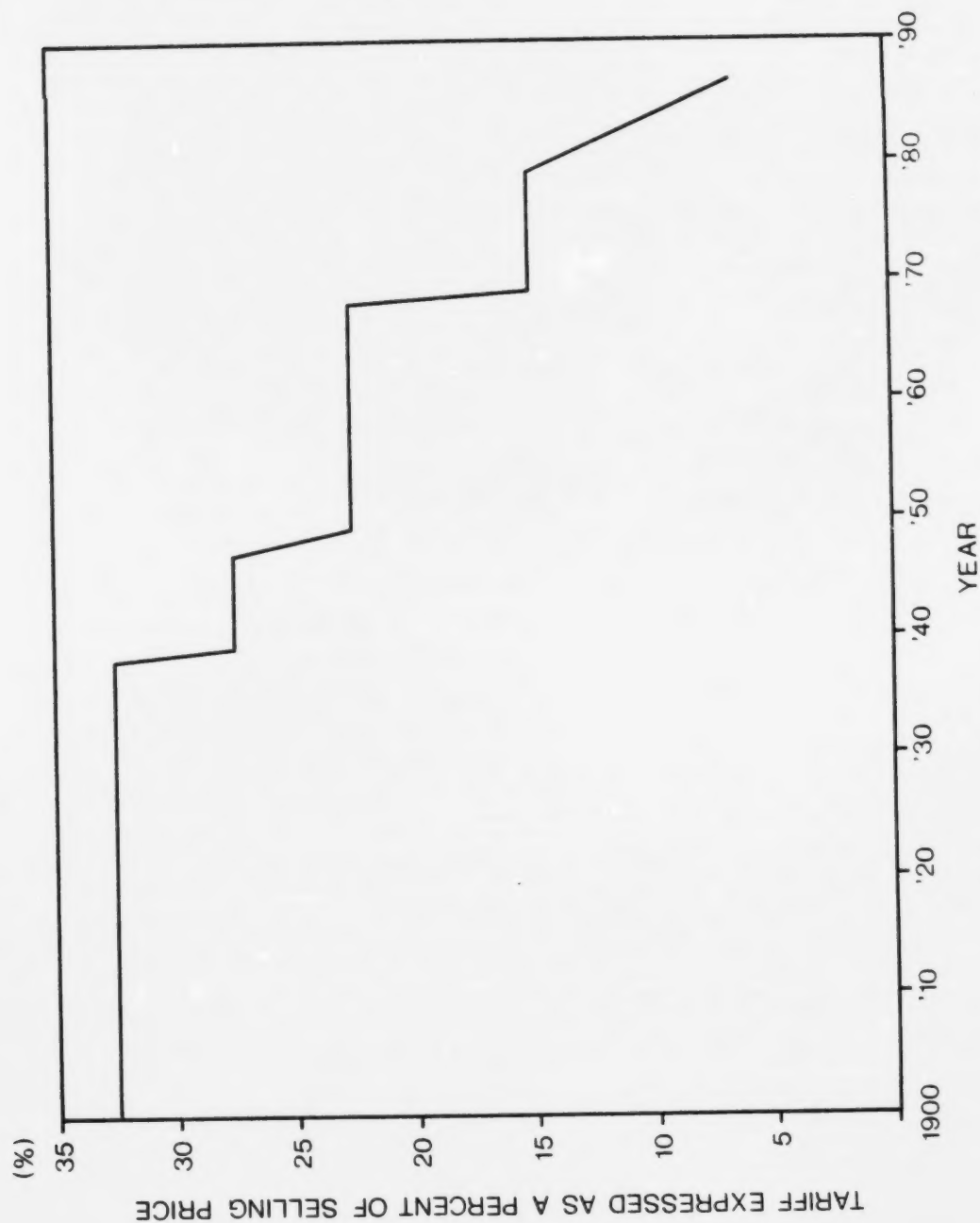
Since its development in the late nineteenth century, Canada's fine paper industry has catered almost exclusively to domestic markets. High tariff walls have protected the Canadian market from international competitors. Tariffs on most fine papers entering Canada were as high as 33% at the turn of the century, but were reduced gradually to 23% in 1968. The industry was shaken by a sharp tariff reduction from 23 to 15% in 1969, but by taking advantage of tariff reductions in other countries, it managed to retain and even increase production levels in the following year, albeit at reduced margins. Shipments in 1970 increased by nearly 15% and exports by more than 30% over those of 1969.

As a result of the most recent (1979) General Agreement on Tariffs and Trade (GATT) negotiations, fine paper tariffs are to be reduced from 15% to 6.5% between 1980 and 1987. Figure 4 illustrates tariff reductions on fine paper imports from the turn of the century to 1987.

The effect of these GATT tariff reductions is to dissolve the traditional market boundaries of Canadian producers. Domestic producers must now consider the productivity and cost-efficiency of producers beyond Canadian borders and the development potential of new export markets. Very simply, Canadian producers face the realities of competing internationally. Primarily, this competition will be with the United States.

The reduction of tariffs has merit from a consumer's point of view in that the market will now include a larger number of competitors willing to offer a number of similar products at lower prices. Canadian producers, however, may not be so enthusiastic about the effects of these reductions. Canadian producers have been compelled to operate within a much smaller market than their American counterparts. This would suggest that Canadian producers have traded off economies of scale for diverse product lines. It is assumed that the cost of such trade-offs has been passed on to the consumer. American producers, on the other hand, have enjoyed the advantages of a much larger market. This would suggest that American producers have achieved economies of scale in many of the more common fine paper grades. Canadian producers will find it increasingly difficult to compete both domestically and internationally in these product lines.

The reduction of tariffs will, in effect, reduce the selling price of American imports in Canada, if we assume that American producers will not hold their prices up and take larger margins. To compete successfully, Canadian producers will either have to reduce their prices to meet this competition or stay out of these product lines. The key point to be noted is that although American operating margins will remain unchanged in the Canadian market while tariffs are reduced (Canadian consumers will simply be paying less duty to the Canadian government), domestic operating margins will be reduced by amounts equivalent to the price reduction on Canadian production. Because of the absolute effect of the reductions, the slimmer the Canadian margin before the tariff reduction, the more exaggerated the effect will be. Table 3 illustrates the effect of tariff reductions on the profitability of Canadian producers between 1979 and 1987 over



Sources: 1) Donnan, J.A. and Victor, P.A. 1974. Alternative policies for pollution abatement: the Ontario pulp and paper industry. Vol 2. (unpubl.)
2) Revenue Canada. 1983. 1983 Customs tariff.

Figure 4. Fine paper tariffs in Canada, 1900-1987 (Does not include coated papers for magazines, periodicals and newspapers; tariffs on these groups of products dropped from 22.5% to 0 in 1951.)

Table 3. The effect of tariff reductions on Canadian margins.

Initial 1979 margin	1980	1981	1982	1983	1984	1985	1986	1987	8-year profit re- duction(%)
5 %	4.1	3.3	2.3	1.3	0.4	(0.6)	(1.4)	(2.6)	(136.6)
10 %	9.2	8.4	7.4	6.5	5.7	4.7	3.8	2.8	(69.6)
12.5%	11.7	10.9	10.0	9.1	8.3	7.3	6.5	5.5	(53.0)
15 %	14.2	13.4	12.6	11.7	10.9	10.0	9.2	8.2	(42.3)
20 %	19.3	18.5	17.7	16.9	16.1	15.3	14.5	13.6	(29.5)
Tariff ^a (%)	13.9	12.9	11.8	10.8	9.7	8.6	7.6	6.5	

^a As detailed in Table 2, line 50 of the 1983 customs tariff. (Note: not all fine paper grades fall within this schedule.)

$$\text{Calculation: } \text{selling price}_n = \frac{\text{selling price}_{(n-1)} \times \text{tariff}_n}{\text{tariff}_{(n-1)}}$$

(dollars/tonnes)

$$\text{and, operating margin}_n = \frac{\text{selling price}_n - \text{production cost 1983}}{\text{selling price}_n}$$

- Assumptions:
- 1) Constant exchange rate.
 - 2) Canadian fine paper productivity (cost efficiency) does not change over this period (i.e., production cost does not change).
 - 3) Selling prices of American imports will decrease by the amount of the tariff reduction.
 - 4) Inflation rate is the same in Canada and the United States.

a number of assumed initial margins. Other things being equal except the tariff reduction, a margin of 15% in 1979 would be reduced to 8.2% in 1987. On the other hand, an operating margin¹ of 5% would be reduced to a loss of 2.6% on sales in 1987. This simple analysis clearly demonstrates that the scheduled tariff reductions very much discriminate against the inefficient, high-cost domestic producers competing in those product lines which are being imported.

¹ Operating margin = profit before interest, taxes and administrative overhead as a percentage of sales.

EXCHANGE RATE CONSIDERATIONS

With the tariff reduction Canadian producers are entering an international marketing environment and accordingly become exposed to short-term exchange rate fluctuations. For the most part movement of the Canadian dollar against the American dollar since 1979 has been downward. This has increased the relative nominal price of American imports and therefore has masked the effect of the tariff reduction. A rapid valuation of the Canadian dollar against the American dollar at this point would jeopardize Canadian export opportunities over the short term.

COMPETITION IN THE FINE PAPER INDUSTRY

For purposes of analysis in this report, competition in Canada's fine paper markets has thus far been assumed to be based on price. The ability to provide a competitively priced product and still realize acceptable levels of profitability is, of course, paramount for Canadian producers assessing the threat of American competition; however, there are a number of qualitative competitive elements that should be considered as well. Competition in this industry is based on:

- 1) customer relations
- 2) product quality
- 3) product development
- 4) delivery time
- 5) price

1) Customer relations: The fine paper industry in Canada is characterized by relatively few producers and a large number of customers, product lines and product uses. Independent paper converters and paper merchants link producers to consumers although it is not uncommon for producers to integrate forward into these areas. Because the purchase of fine papers is not usually a major expense in relation to the consumer's total cost of doing business, he will often reorder such papers. At least initially, American paper merchants may find it difficult to dissolve these relations simply by offering a product at a slightly lower price.

2) Product quality: Many customers set technical specifications that are met by only a limited number of producers. In these cases, switching producers becomes risky. Such actions have an associated cost, and would be justified only if products were priced at well below parity.

3) Product development: Producers of special grades of paper must constantly monitor the changing requirements of the customer and, in some cases, produce paper to order. It is questionable whether large American producers would be willing to offer this level of service in Canada, in view of the high overhead costs involved and the limited potential of this market in relation to their own.

4) Delivery time: Most Canadian consumers of fine paper are relatively small. They cannot afford to carry large inventories; hence, they tend to order small quantities. Because Canadian producers are located closer to the bulk of Canadian consumers they can deliver products more quickly and at a lower cost than American producers.

5) Price: With the exception of the few qualitative factors mentioned above, product differentiation by the fine paper consumer has been, and will continue to be, based on price. The lower the price, the more these other factors will be neutralized; and, of course, in order to offer such a competitively priced product over the long term, a producer must have competitive costs. The Canadian market is becoming far more accessible to American producers on account of the tariff reductions. It is therefore necessary to examine the cost of production of both Canadian and American producers in order to determine the ability of Canadian producers to offer competitive prices in this new environment.

COST ANALYSIS

Figure 5 illustrates average total costs (direct and indirect) for uncoated free sheet papers produced in Canada, the United States (average), and the southern United States as estimated by Data Resources Inc. of Canada.

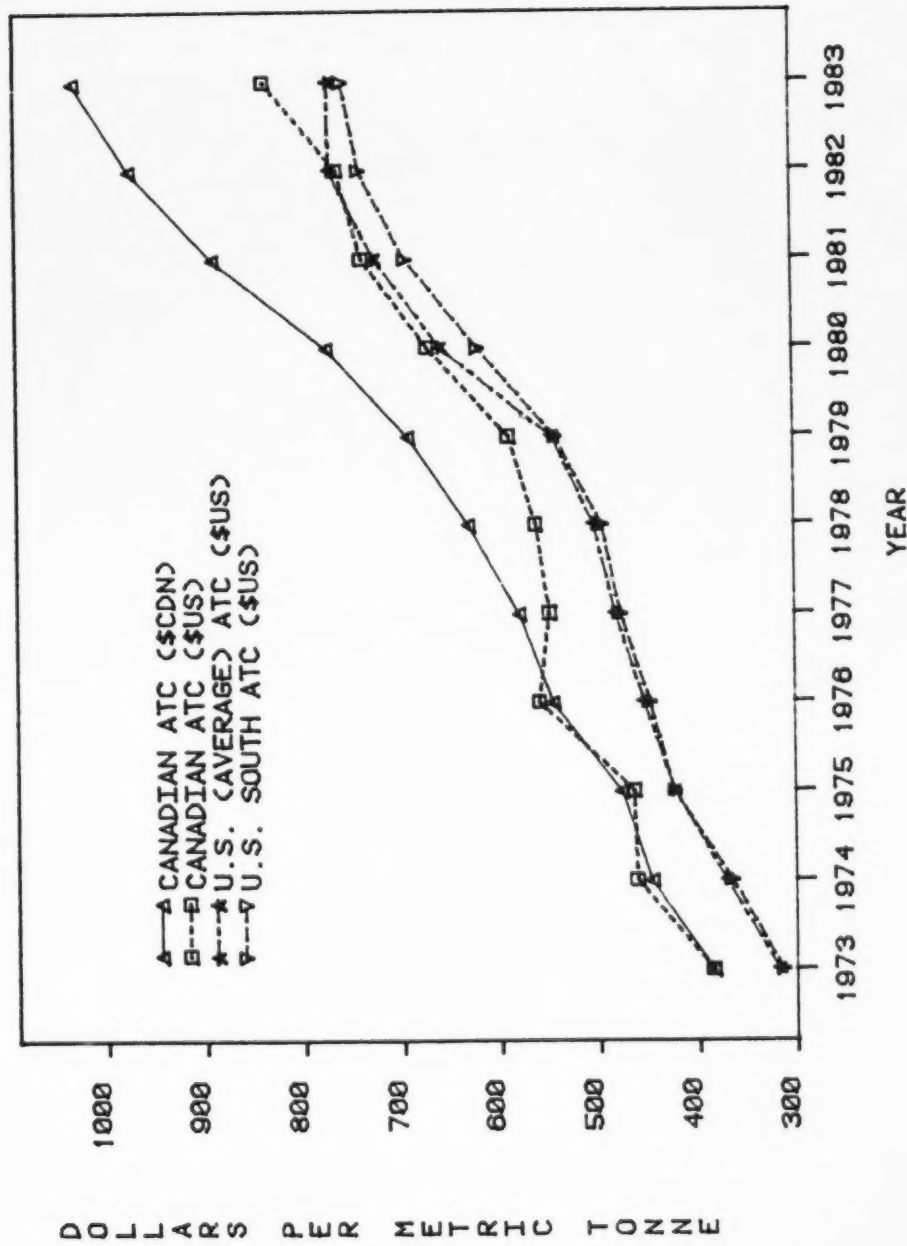
Figure 5 indicates that, between 1979 and 1983, the total cost for Canadian-produced uncoated freesheet papers increased by 53%. Over the same period, the Canadian Fine Paper Selling Price Index increased by only 31%, an indication of a cost-price squeeze for Canadian producers. Costs for American producers increased by only 45% for uncoated free sheet papers between 1979 and 1983.

Fortunately for Canadian producers, the Canadian dollar depreciated greatly over this period in relation to the American dollar, so that in Canadian dollars, costs for American producers actually increased by 68%. Even with this advantage, costs for American producers in Canadian dollars were still only 92% of those for Canadian producers in 1983. If the Canadian and American dollars were at par, costs for American producers would have been 75% of those for Canadian producers in 1983.

It appears that American producers have lower production costs for two reasons: 1) they have larger and more efficient production facilities than do Canadian producers, and 2) their labor costs are lower.

Production Facilities

The protectionist measures taken by governments to nurture their fine paper producers have motivated producers in both the United States and Canada to cater almost exclusively to their respective domestic markets. Because the American market is almost 11 times the size of the Canadian market, however,



Source: Data Resources of Canada. Inc. 1983. Average total cost, uncoated freesheet. Quarterly time series. (unpubl.)

Figure 5. Average total cost (ATC) of uncoated freesheet paper, 1973-1983

American producers have been able to capitalize on economies of scale. Longer runs on most grades result in fewer run changeovers, and this reduces overall production costs. Many Canadian producers, on the other hand, find it necessary to trade off economical runs for diverse product lines in order to satisfy domestic demand.

Fine paper machines in the United States tend to be larger and more modern than these in Canada. Most Canadian machines were last overhauled before the 1960s. Canada's largest machine (at Great Lakes Forest Products Limited, Dryden, Ontario) has an annual capacity of 123,000 tonnes. The next largest (Domtar, Inc., Cornwall, Ontario) has a capacity of 91,000 tonnes. In the United States, however, a great deal of production capacity will have come on stream between 1982 and 1984 employing the latest technology, with machines capable of producing as many as 160,000 tonnes per year (Scott Paper Co., Skowhegan, Maine). At the same time, old machines are being replaced with the result that the productivity of the entire American industry is being upgraded in a relatively short period of time.

Canadian producers do have some cost advantages over their American counterparts. Generally speaking, Canadian producers of fine paper enjoy lower power costs, and while wood cost varies greatly across the industry, Canadian producers do have a more secure and more readily available wood supply. In addition, most fine paper producers in Canada are but one division of larger, horizontally integrated firms. This reduces risk (and therefore financing charges) and decreases other fixed costs (marketing, transportation and administrative charges).

Labor Costs

Large wage settlements weigh heavily on this labor intensive paper industry. Unlike newsprint which requires four to five man-hours per tonne of production, fine paper requires anywhere from eight to 16 man-hours per tonne (Wolfe 1982). Depending on the nature of the facility and the product being manufactured, labor costs can range from 10 to 25% of total production costs. Fine paper unions in Ontario cite the need to attain wage parity with their newsprint and pulp counterparts as justification for the high wage demands made during the 1981 contract dispute. A seven-month strike at Domtar's Ontario mills forced management to accept a 25% increase in base wage rates that year, followed by a 9% per year increase until 1984. Table 4 illustrates that, in 1983, base wage rates of the larger fine paper locals (Locals 77, 212, 338 and 419 of the Canadian Paperworkers Union) are still almost 10% lower than the average for eastern Canadian pulp and paper industries. It is inevitable that these locals will attempt to narrow this gap further in the next round of contract negotiations in 1984.

Table 4. Comparison of fine paper industry base wage rate^a with average pulp and paper rates in eastern Canada, 1980-1983.

Year	Fine papers eastern Canada (C\$)	Pulp and paper eastern Canada (C\$)
1983	11.37	12.52
1982	10.43	11.38
1981	9.43	10.16
1980	7.54	9.23

Sources: Anon. 1983b.

Smith, J.H. and Brownwright, A.J. 1983. Collective bargaining settlements, forestry sector, Ontario, 1981-1983. Dep. Environ., Can. For. Serv., Sault Ste. Marie, Ont. 68 p. (unpubl.)

DISCUSSION

The reduction of Canadian tariffs is forcing Canada's fine paper industry into an international marketing environment--one that would see competitive American production threaten the traditional markets of domestic producers. In addition, these reductions have placed the Canadian industry in a more vulnerable position with respect to Canada-U.S. exchange rates. The reduction of tariffs not only reduces the competitive ability of Canadian producers in Canadian markets, but it also increases the risk of doing business in the Canadian industry. Should the American industry become oversupplied (although this is unlikely before 1986) concurrently with a rapid valuation of the Canadian dollar, much of the Canadian industry would very quickly suffer substantial losses. If only 3% of American production were sold in Canada, American producers would have 45% of the Canadian market share.

It is necessary for Canadian producers to modify marketing strategies to adapt to this new environment. It is speculated that most competition will be in the more common fine papers. Producers with small, integrated Canadian fine paper production facilities would be prudent to drop these lines and focus on high-quality specialty grades for which competition is less severe and margins are greater. In order to accommodate longer runs in these grades, the American market would have to be tapped. This approach would require that technically oriented service groups provide custom service to potential customers in the United States through American-based merchants and producers. Product quality and service should be of paramount importance to these producers. They should attempt to focus on maximum profit, not just cost reduction. It appears that Fraser Inc. has recently adopted such a strategy. Through equity participation in Island Paper Mills Ltd. (Anon. 1983) and the acquisition of the Thorold, Ontario mill, Fraser is exporting a good deal of its production to the United States. Rolland Inc. of Montreal has flourished for years on the basis of this philosophy.

Through rationalization of product lines and modernization programs, several Canadian firms are quite capable of competing directly with American producers in the more common grades in the American and Canadian markets. Many Canadian firms have recognized the urgency of such programs. Domtar Inc. has scheduled a 6-year, \$773 million expansion of its Windsor, Quebec mill which would replace the existing 88,000-tonne machine with two 160,000-tonne machines, and an improved pulping unit (Gibbens 1983). In addition, \$139 million will be spent on modernization of the Cornwall mill in 1984. Great Lakes Forest Products Ltd. will have replaced its two fine paper machines at Dryden with one 123,000-tonne-per-year machine in March 1984 at a cost of \$100 million (Anon. 1984). In 1983, MacMillan Bloedel Ltd. and Fraser Inc. completed construction of a 75,000-tonne-per-year fine paper machine at Island Paper Mills Ltd. in New Westminster, British Columbia (Webster 1984) and Eddy Forest Products Ltd. overhauled its pulping unit at Espanola, Ontario (Johnson 1984). These investments are costly even to fully integrated firms such as these but necessary if the firms intend to continue to compete in the more common fine paper grades over the long term.

The future of the small, non-integrated fine paper producers is questionable. It is very likely that these facilities will be phased out in favor of new, more efficient capacity. At present these facilities account for approximately 9% of total Canadian capacity.

In summary, the long-term profitability of Canada's fine paper industry depends on its ability to compete with lower-cost American production in both Canadian and American markets. Product lines must be rationalized. For many producers this may mean letting some traditional markets and product lines slide. Where financing is available, Canadian producers must establish world class mills. The United States export market holds much potential for efficient Canadian producers, who will have to enter it in order to develop markets for this new class of mill. One percent of the American fine paper market represents approximately 150,000 tonnes of production--or 14% of Canadian capacity in 1984. Analysis has shown that a 'do nothing' strategy would be fatal to most Canadian producers. Those firms which undertake capital expenditure programs and exploit new export market opportunities will minimize the effect of the tariff reductions on the long-term profitability of this industry.

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